MINIFEX FEX800

User's manual

GB

Version 1.0 October 2005

www.behringer.com

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JUST LISTEN.

IMPORTANT SAFETY INSTRUCTIONS

CAUTION: To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user serviceable parts inside; refer servicing to qualified personnel.

WARNING: To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture. The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

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This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure—voltage that may be sufficient to constitute a risk of shock.

This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.

DETAILED SAFETY INSTRUCTIONS:

1) Read these instructions.

2) Keep these instructions.

3) Heed all warnings.

4) Follow all instructions.

5) Do not use this apparatus near water.

6) Clean only with dry cloth.

7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11) Only use attachments/accessories specified by the manufacturer.

12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tipping over.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.

14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

15) CAUTION - These service instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operation instructions unless you are qualified to do so.

MINIFEX

Ultra-Compact 24-Bit Stereo Multi-FX Processor

- Ultra-compact 9.5” stereo multi-effects processor for studio and stage applications
- 16 awesome FX presets in 24-bit/48 kHz resolution including reverb, delay, chorus, flanger, phaser, rotary speaker, pitch shifter and multi-effects
- Intuitive FX Preset control with LED's indicating the selected program
- Versatile Edit and Tap/Select functions to control a wide range of FX parameters
- Stereo Input Level control with accurate 6-digit LED Input meter for precise level indication
- Dedicated Mix Balance and Output Level controls for perfect effects level adjustment
- Additional footswitch connector for easy FX on/off control
- High-quality potentiometers and illuminated switches for long-term reliability
- Ultra low-noise audio operational amplifiers offer outstanding sound performance
- All Mini Series models can be stacked on top of each other to create an ultra-compact signal processor solution
- High-quality components and exceptionally rugged construction ensure long life
- Conceived and designed by BEHRINGER Germany

FEX800

FOREWORD

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Dear Customer,

welcome to the community of Mini Series users and thank you very much for expressing your confidence in BEHRINGER products by purchasing the FEX800. It is one of my most pleasant tasks to write this letter to you, because it is the culmination of many months of hard work delivered by our engineering team to reach a very ambitious goal: to design an outstanding device whose high level of functionality will give you maximum performance.

The task to design our new MINIFEX certainly meant a great deal of responsibility. You, the discerning user and musician, were the focus of our entire development efforts. It also meant a lot of work and night shifts to accomplish this goal. But it was fun, too. Developing a product usually brings a lot of people together, and what a great feeling it is when everybody who participated in such a project can be proud of what we've achieved.

It is our philosophy to share our joy with you, because you are the most important member of the BEHRINGER family. With your highly competent suggestions for new products you've greatly contributed to shaping our company and making it successful. In return, we guarantee you uncompromising quality as well as excellent technical and audio properties at an extremely favorable price. All of this will enable you to fully unfold your creativity without being hampered by budget constraints.

We are often asked how we can make it to produce such high-grade devices at such unbelievably low prices. The answer is quite simple: it's you, our customers! Many satisfied customers means large sales volumes enabling us to get better conditions of purchase for components, etc. Isn't it only fair to pass this benefit back to you? Because we know that your success is our success, too!

I would like to thank all people whose help on "Project MINIFEX FEX800" has made it all possible. Everybody has made very personal contributions, starting from the designers of the unit via the many staff members in our company to you, the user of BEHRINGER products.

My friends, it's been worth the trouble!

Thank you very much,

Uli Behringer

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1. INTRODUCTION

Thank you for showing your confidence in BEHRINGER products by purchasing the MINIFEX FEX800. With the MINIFEX FEX800 you have purchased an extremely flexible yet easy-to-use multi-effects device, which you will surely come to appreciate for its sound enhancement capabilities both on stage and in the studio.

Our ultra-compact stereo multi-effect processor is a useful addition to any set-up: You get 16 fantastic effects presets in 24-bit quality, including reverb, delay, chorus, flanger, phaser, rotary speaker, pitch shifter and other multi-effects. Thanks to the intuitive FX preset control with its LEDs displaying the currently selected program, nothing could be easier than operating the FEX800. What is more, a variety of edit and tap/select functions allows you to modify the effect parameters extensively. A high-precision, 6-digit LED display can be used to accurately set the stereo input level.

Further features are the handy Mix Balance and Output Level controls for precise effect level setting, as well as an additional footswitch connector for easy enabling/disabling of effects.

The FEX800 will take your music productions to a higher level!

1.1 Before you get started

1.1.1 Shipment

Your FEX800 was carefully packed at the assembly plant to assure secure transport. Should the condition of the cardboard box suggest that damage may have taken place, please inspect the unit immediately and look for physical indications of damage.

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☞ **Damaged equipment should NEVER be sent directly to us. Please inform the dealer from whom you acquired the unit immediately as well as the transportation company from which you took delivery. Otherwise, all claims for replacement/repair may be rendered invalid.**

☞ **Please always use the original packaging to avoid damage due to storage or shipping.**

☞ **Never let unsupervised children play with the FEX800 or with its packaging.**

☞ **Please dispose of all packaging materials in an environmentally friendly fashion.**

1.1.2 Initial operation

Be sure that there is enough space around the unit for cooling. To avoid overheating, do not place the FEX800 on top of power amps or near radiators, etc.

☞ **To power the FEX800, use only the power supply unit that is delivered with your equipment.**

☞ **Please ensure that the unit is installed and operated only by people qualified to do so. During installation and operation the user must have sufficient electrical contact to earth. Electrostatic discharge may affect the operation of the unit.**

☞ **Malfunction may occur due to static discharge at the inputs/outputs of the FEX800. In this case, switch off the unit temporarily.**

1.1.3 Online registration

Please do remember to register your new BEHRINGER equipment right after your purchase by visiting www.behringer.com (alternatively www.behringer.de) and kindly read the terms and conditions of our warranty carefully.

Should your BEHRINGER product malfunction, our goal is to have it repaired as quickly as possible. To arrange for warranty service, please contact the retailer from whom the equipment was purchased. Should your BEHRINGER dealer not be located in your vicinity, you may directly contact one of our subsidiaries. Corresponding contact information is included in the original equipment packaging (Global Contact Information/European Contact Information). Should your country not be listed, please contact the distributor nearest you. A list of distributors can be found in the support area of our website (www.behringer.com/support).

Registering your purchase and equipment with us helps us process your repair claims quicker and more efficiently.

Thank you for your cooperation!

2. CONTROL ELEMENTS AND CONNECTIONS

2.1 Front panel

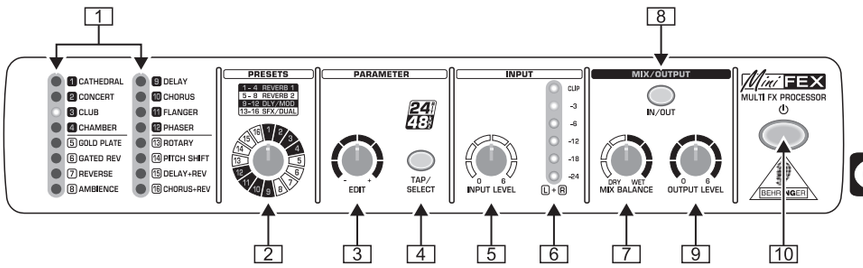

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Fig. 2.1: Front panel control elements of the FEX800

1 The two LED displays show the effect preset currently selected. One LED is assigned to each preset.

☞ **The presets are grouped in four categories: REVERB 1 (1-4), REVERB 2 (5-8), DELAY/ MODULATION (9-12), SPECIAL FX/DUAL EFFECTS (13-16).**

2 Use the *PRESETS* control to select one of the 16 effect presets.

3 The *EDIT* control allows you to edit one effect parameter. The center position corresponds to the default setting programmed for the preset.

☞ **When you change presets the FEX800 always recalls the default or user settings for the selected preset, irrespective of the position of the EDIT control. However, the user settings will remain effective only as long as the unit is not switched off or disconnected from the mains.**

4 The *TAP/SELECT* button performs two functions:

▲ **TAP (tempo entry):** Hit the button several times in the tempo of the music piece to adapt the delay time of presets 9 and 15 or the modulation speed of presets 10-12. The button starts flashing in the corresponding tempo.

▲ **SELECT (additional effect parameter):** Press this button to choose between two different effect characteristics when using presets 1-8, 13-14, 16. When the button lights up this means that the corresponding parameter of the selected preset has been activated.

☞ **Table 6.1 gives you an overview of all effect parameters that can be edited in the various presets .**

5 Use the *INPUT LEVEL* control to adjust the input signal level. Please be sure to set a level that is sufficiently high but does not overload the unit.

6 The *L+R* LED display is for monitoring the input level. It comprises 6 LEDs. When the *CLIP* LED lights up, this indicates that digital distortion may occur at the input of the FEX800. In this case, the input signal level must be reduced.

7 Use the *MIX BALANCE* control to adjust the ratio of original vs. effect signal. Turn the control fully to the right to hear only the processed effect signal. Turn it fully to the left to hear only the unprocessed input signal.

8 The *IN/OUT* button enables/disables the effect signal. The button lights up when the input signal is being processed by the FEX800. In order to hear the processed signal you have to set a suitable ratio of effect vs. direct signal using the MIX BALANCE control 7.

9 Use the *OUTPUT LEVEL* control to adjust the output level.

10 The ⏻ switch turns your MINIFEX FEX800 on and off. The switch lights up when the unit is switched on.

☞ **Merely switching the unit off does not mean that it is fully disconnected from the mains. To disconnect the unit from the mains, pull out the mains connector. Please make sure before installation that the mains connector has not been damaged. If you do not use the unit for an extended period of time, please disconnect it at the mains.**

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2.2 Rear panel

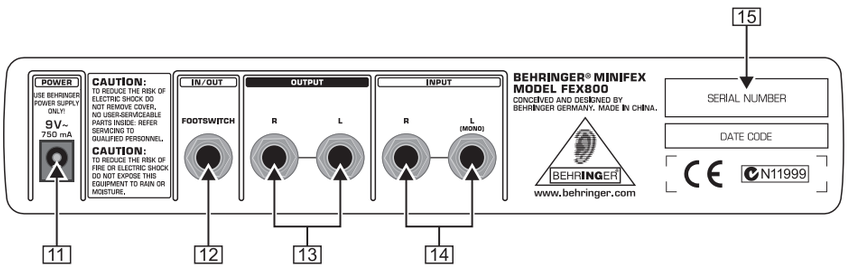

Fig. 2.2: Rear panel connectors of the FEX800

11 The FEX800 is connected to the mains using a 2-pole *POWER* connector jack. A matching mains adaptor is included with the unit.

☞ **To avoid damage to your FEX800 always use the mains adaptor supplied with the unit.**

12 A single footswitch can be connected to the *IN/OUT* connector. This footswitch allows you to remotely control the IN/OUT button 8 on the front panel and switch the effect signal on and off.

13 The two *OUTPUT* connectors are on 1/4" connectors and provide a balanced left/right signal.

14 The two *INPUT* connectors are on 1/4" connectors and can be used for unbalanced signals. A single mono signal should be connected to the *L* jack.

15 *SERIAL NUMBER*.

3. THE EFFECTS

Your MINIFEX FEX800 comes with 16 presets, which are grouped in four different categories. All of them are stereo effects.

☞ **Table 6.1 contains a list of the preset effect parameters which can be edited as well as a description of the TAP/SELECT button's function.**

3.1 REVERB 1

The presets from the REVERB 1 category reproduce the characteristics of natural spaces of different sizes.

- **CATHEDRAL** simulates the reverberation that you can hear in big cathedrals. This effect is characterized by a long reverb and very specific echoes. It works well with solo instruments and vocals.
- **CONCERT** simulates the reverberation in a mid-size concert hall. The preset is well suited for all natural instruments such as piano. When used sparingly, it also gives vocals an interesting touch, for example, in ballads.
- **CLUB** simulates the cozy atmosphere of a mid-size jazz club or theater. This reverb is characterized by its early reflections and short decay. The preset works well with vocals, electric piano, drums, saxophone and other instruments.
- **CHAMBER** simulates the typical characteristics of a studio. The preset is well suited for drums, guitars and vocals or whenever you need an unobtrusive reverb to breathe some life into a signal.

3.2 REVERB 2

REVERB 2 comprises popular artificial reverb algorithms, which characterize numerous pop/rock and dance tracks of the last few years.

- **GOLD PLATE** simulates the legendary sound of a reverb plate as used in former studio reverb units. This effect features a very dense sound of its own and is particularly suited to produce a very distinct reverb, e.g. for drums and vocals.
- **GATED REV** simulates the reverb type cut off by a gate, which was very popular in the 80's. This effect was typically used with snare or kick drums, but can be used to achieve interesting effects with other instruments too.
- **REVERSE** produces a reverb which has its reverb tail reversed. Consequently, the reverb volume does not decrease over time but increases. This preset can be used for unusual effects with the most varied kinds of signals. A very popular application is to use it for snare drums.
- **AMBIENCE** provides the signal with spatial information, however, does not produce an audible reverb. The preset works well with drums, keyboards, guitars and vocals or whenever you need an unobtrusive room sound without reverb.

3.3 DLY/MOD

The DELAY/MODULATION category offers three modulation effects for special sound-tweaking applications and one stereo delay preset.

- **DELAY** produces several echoes/delays of the input signal, reduces them in level and adds them to the original signal (echo effect). Use the DELAY preset to create effects which are very interesting in terms of rhythm. This preset can be used for virtually any instruments. It is particularly useful for keyboards, guitars and vocals.
- **CHORUS** gives a signal more body and width, so that it sounds richer. CHORUS can be used for virtually any signals which should sound a bit fuller.
- **FLANGER** gives a signal a wonderful „retro“ touch. FLANGER has always been a popular effect for guitars and keyboards. But you can also produce interesting sounds in combination with drums, vocals or other signals.
- **PHASER** is an effect which adds a copy of the input signal, however, shifted in phase. PHASER is a traditional guitar, electric piano and keyboard effect. But you can also produce distinctive effect sounds in combination with drums or other signals.

3.4 SFX/DUAL

This category includes two effects for special sound modifications, as well as two presets providing a combination of two effects.

- **ROTARY** simulates the accelerating, braking and rotating movements of a Leslie® loudspeaker system. The fast rotation produces a characteristic shifting of frequencies. Traditionally, this is an effect for electronic organ. However, it can also be used for other signals.
- **PITCH SHIFT** adds another signal to the original signal, below or above the original pitch. This effect is particularly suited to enhance the sound of guitars and vocals.
- **DELAY+REV** is a useful combination of the DELAY and CONCERT effects. This effects combination works particularly well with guitars, keyboards and vocals.
- **CHORUS+REV** is a useful combination of the CHORUS and CLUB effects. This effects combination is a classic effect for guitars and electric pianos.

4. APPLICATION EXAMPLES

The FEX800 can be integrated into the signal path in various ways. Please find a few wiring examples below.

4.1 The MINIFEX in the aux(iliary) path

It is particularly advisable to connect the MINIFEX via the aux paths of a mixing console. Aux paths are signal busses to which you can route specific signals. Each channel strip on a mixing console has a level control for each aux path, which determines the signal portion routed from the respective channel strip to the aux bus. The signal is routed from the aux bus output of the console to an effects unit for processing. Subsequently, the processed effect signal from the external effects processor is routed back to the console via an aux return or other mono/stereo input, where it is mixed with the unprocessed original signal in the main mix bus.

This way of connecting your FEX800 allows you to adjust different effect intensities for different instruments. For example, you could give a snare drum more reverb than a kick drum. The volume ratio of direct vs. effect signal is determined using the aux return level control, while the aux send control in the corresponding channel strip adjusts the effect intensity for each instrument. Two mono aux paths are required for stereo signal processing. If you want to process single signals in mono, please use only one aux path. In this case, the aux send output must be connected to the L(MONO) jack in the INPUT section [14] of the FEX800.

☞ **Please make sure that the FEX800 provides only one effect signal in this type of application (MIX BALANCE control [7] turned fully right).**

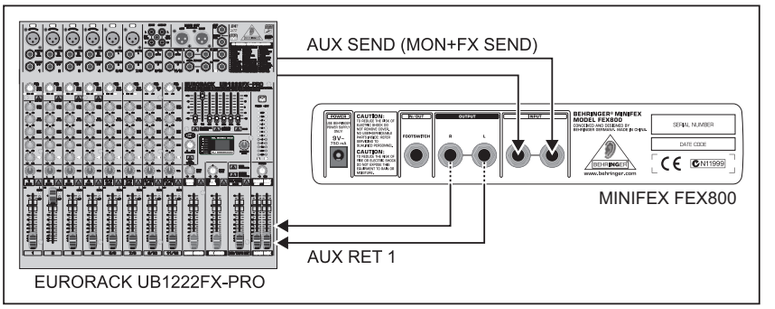

Fig. 4.1: Wiring the MINIFEX via the aux paths

4.2 The MINIFEX in the insert path

If your mixing console is equipped with insert paths, you can also connect the MINIFEX using these combined inputs/outputs. In this case, the effects unit is directly integrated into the signal path of the mixing console. Such a configuration is usually required for signal processors such as compressors, because you only want to use the processed signal rather than a mix of direct and effects signals. In order to use an effects unit such as the MINIFEX in the insert path, you will have to adjust the desired volume ratio of direct vs. effect signal with the MIX BALANCE control [7].

Please use the respective channel insert to process specific instruments. Groups of instruments or stereo mixes can be processed with the sub-group/main-mix inserts.

Regler einstellen.

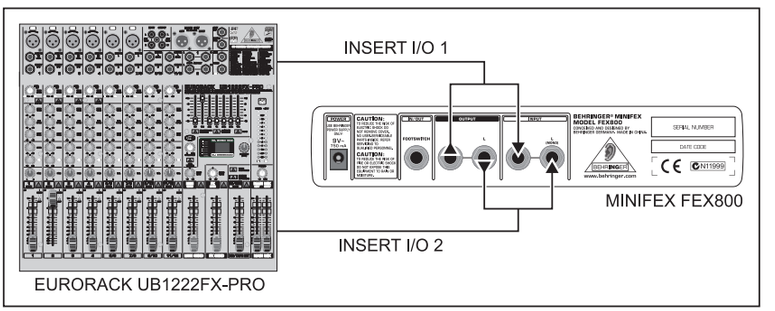

Fig. 4.2: Wiring the MINIFEX via the insert paths

4.3 The MINIFEX as an effects unit for instruments

You can also use the MINIFEX on stage as an effects unit for keyboards. This can be useful if your keyboard has only limited effect capabilities or if you want to process selected sounds with the MINIFEX effects via existing single outputs. The illustration below shows how to wire the FEX800 either to an amplifier or via a D.I. box to a mixing console. You can switch the effect on and off using an additional footswitch.

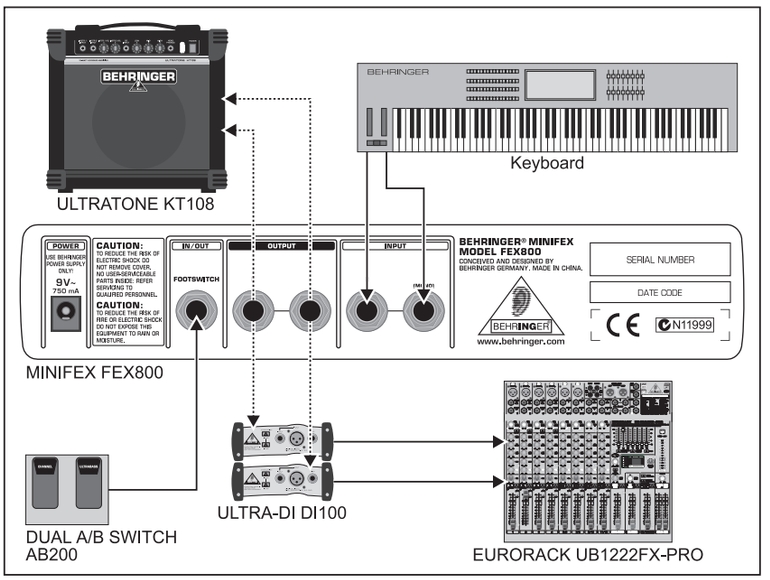

Fig. 4.3: Connecting the MINIFEX to an amplifier or D.I. box

5. AUDIO CONNECTIONS

There are various ways to integrate the FEX800 into your set-up. Depending on the application in question, you will need different sets of connecting cables. The cables to use are described below.

5.1 Connection with insert cables

Please use standard insert cables equipped with 1/4" connectors to connect the MINIFEX to the insert path of a mixing console. These Y cables have two 1/4" TS connectors at one end, and one 1/4" TRS connector at the other. Connect the plug marked „Send“ to the INPUT L jack on the effects unit. Connect the „Return“ plug to the OUTPUT L jack on the device. Connect the TRS connector to the insert jack of the channel strip on the mixing console. Use two insert cables for stereo sub-groups and main-mix inserts. The second cable must be connected to the INPUT/OUTPUT R jacks of the FEX800.

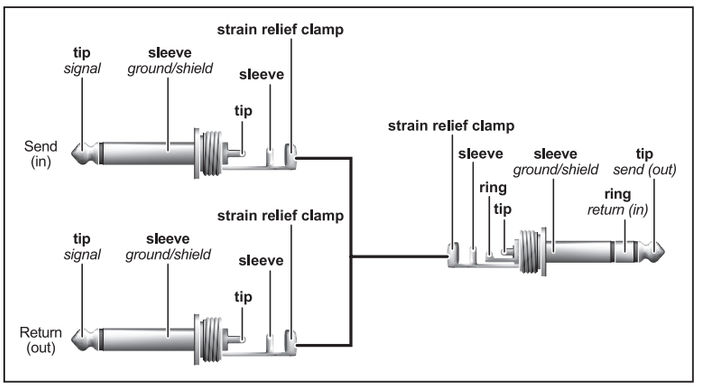

Fig. 5.1: Insert cable with two 1/4" TS and one 1/4" TRS connector

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5.2 Connection with 1/4" cables

To wire the MINIFEX in series with other equipment or via the aux paths of a mixing console, please use 1/4" cables, sometimes also referred to as patch cords. These cables have a 1/4" connector at each end. Connect the aux send outputs of your console to the inputs, and the aux returns to the outputs of the MINIFEX. You can also connect balanced stereo 1/4" cables to the MINIFEX outputs.

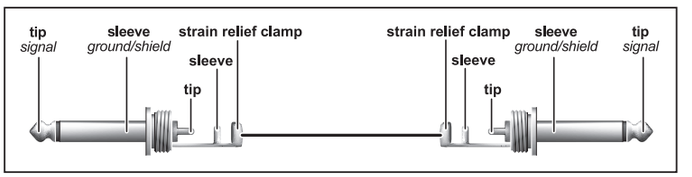

Fig. 5.2: Unbalanced cable with 1/4" TS connectors

5.3 Footswitch connection

The MINIFEX features a jack for connecting a footswitch. Here, you can connect any standard footswitch with a 1/4" TS connector. As some footswitch models on the market have a different polarity, please be sure to use one that is appropriately wired. The correct wiring is shown in the illustration below.

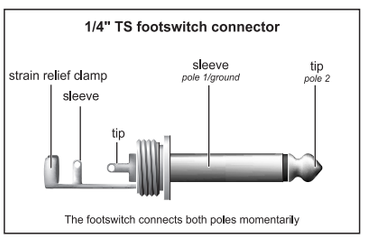

Fig. 5.3: Wiring of a 1/4" TS connector for footswitch connection

6. APPENDIX

6.1 List of effects and parameters

Effect no.	Effect	EDIT Parameter 1	TAP/SELECT Parameter 2	TAP/SELECT LED
1	CATHEDRAL	Reverb time	Brilliance	off/on
2	CONCERT	Reverb time	Brilliance	off/on
3	CLUB	Reverb time	Brilliance	off/on
4	CHAMBER	Reverb time	Brilliance	off/on
5	GOLD PLATE	Reverb time	Brilliance	off/on
6	GATED REV	Reverb time	Brilliance	off/on
7	REVERSE	Reverb time	Brilliance	off/on
8	AMBIENCE	Room size	Brilliance	off/on
9	DELAY	No. of repetitions	Time interval TAP	flashing (BPM tempo)
10	CHORUS	Intensity	Tempo TAP	flashing (tempo)
11	FLANGER	Intensity	Tempo TAP	flashing (tempo)
12	PHASER	Intensity	Tempo TAP	flashing (tempo)
13	ROTARY	Intensity	Tempo	off/on
14	PITCH SHIFT	Semi-tone steps (+/-12)	Detune	off/on
15	DELAY+REV	Delay vs. reverb ratio	Time interval TAP	flashing (BPM tempo)
16	CHORUS+REV	Chorus vs. reverb ratio	Reverb time	off/on

Table 6.1: List of effects and parameters

7. SPECIFICATIONS

INPUT	
Type	¼“ TS connectors, unbalanced
Impedance	approx. 30 kΩ
OUTPUT	
Type	¼“ TRS connectors, impedance balanced
Impedance	approx. 220 Ω
Max. output level	+10 dBu
IN/OUT	
Type	¼“ TS footswitch connector
DIGITAL PROCESSING	
Converters	24-Bit Delta-Sigma, 128-times oversampling
Sampling rate	48 kHz
SYSTEM SPECIFICATIONS	
Frequency response	10 Hz to 22 kHz, -3 dB
Dynamic range	96 dB, 10 Hz to 22 kHz
Distortion	0,01 % typ. @ 0 dBFS
Crosstalk	-75 dB @ 1 kHz
Signal-to-noise ratio	10 Hz to 22 kHz <86 dB @ 0 dBu, A-weighted
POWER SUPPLY	
Mains connection	external power supply, 9 V~, 750 mA
Mains voltage	
USA/Canada	120 V~, 60 Hz
U.K./Australia	240 V~, 50 Hz
China	220 V~, 50 Hz
Europe	230 V~, 50 Hz
Japan	100 V~, 50 - 60 Hz
Power consumption	approx. 7,5 W
DIMENSIONS/WEIGHT	
Dimensions (H x W x D)	approx. 47,9 mm x 242,6 mm x 120 mm
Weight	approx. 0,41 kg

BEHRINGER is constantly striving to maintain the highest professional standards. As a result of these efforts, modifications may be made from time to time to existing products without prior notice. Specifications and appearance may differ from those listed or illustrated.

8. OTHER MINI PRODUCTS

The MINIFEX belongs to the MINI suite of BEHRINGER products, which can operate together and are introduced below:

MINIAMP AMP800

Ultra-compact 9.5" headphones amplifier system for studio and stage applications

- ▲ 4 totally independent stereo high-power amplifier sections
- ▲ Highest sonic quality with virtually all types of headphones even at maximum volume

MINICOM COM800

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Ultra-compact 9.5" stereo modeling compressor for studio and stage applications

- ▲ 16 awesome preset models for the most typical compression applications (vocal, drums, guitar, keyboard, etc.)
- ▲ Dedicated Compressor Modeling control with LED's indicating the selected dynamics program

MINIMIC MIC800

Ultra-compact 9.5" microphone modeling preamp for studio and stage applications

- ▲ High-end preamplifier for all microphone, instrument and line-level sources. Perfectly complements studio-grade condenser mics
- ▲ Ultra-flexible Preamp Modeling allows you to quickly optimize your recordings

MINIMON MON800

Ultra-compact 9.5" monitor matrix mixer for studio and stage applications

- ▲ Dedicated input section with 4 selectable and mixable stereo inputs
- ▲ Accurate 6-digit LED main stereo output meters for precise level indication

MINIBEAT BEAT800

Ultra-compact 9.5" dual beat counter/phono preamp for studio and stage applications

- ▲ Intelligent dual BPM counters with Tempo Difference indicator
- ▲ Ultra-flexible Beat Assist and Sync Lock functions

MINIFBQ FBQ800

Ultra-compact 9.5" graphic equalizer for studio and stage applications

- ▲ Revolutionary FBQ Feedback Detection System instantly reveals critical frequencies and can also be used as Audio Analyzer
- ▲ Additional Low Cut filter removes unwanted frequencies, e. g. floor rumble

MINIMIX MIX800

Ultra-compact 9.5" karaoke machine for studio and stage applications

- ▲ Revolutionary Voice Canceller—effectively eliminates vocals from any stereo source while retaining most music elements
- ▲ Integrated digital echo/reverb processor in 24-bit/40 kHz resolution for ultimate vocal enhancement

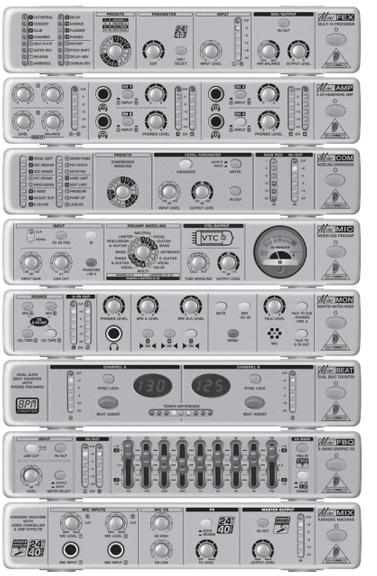

Fig. 8.1: MINI products stack on top of each other

9. WARRANTY

§ 1 OTHER WARRANTY RIGHTS AND NATIONAL LAW

1. This warranty does not exclude or limit the buyer's statutory rights provided by national law, in particular, any such rights against the seller that arise from a legally effective purchase contract.

2. The warranty regulations mentioned herein are applicable unless they constitute an infringement of national warranty law.

§ 2 ONLINE REGISTRATION

Please do remember to register your new BEHRINGER equipment right after your purchase by visiting www.behringer.com (alternatively www.behringer.de) and kindly read the terms and conditions of our warranty carefully.

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Registering your purchase and equipment with us helps us process your repair claims quicker and more efficiently.

Thank you for your cooperation!

§ 3 WARRANTY

1. BEHRINGER (BEHRINGER International GmbH including all BEHRINGER subsidiaries listed on the enclosed page, except BEHRINGER Japan) warrants the mechanical and electronic components of this product to be free of defects in material and workmanship for a period of one (1) year* from the original date of purchase, in accordance with the warranty regulations described below. If the product shows any defects within the specified warranty period that are not excluded from this warranty as described under § 5, BEHRINGER shall, at its discretion, either replace or repair the product using suitable new or reconditioned parts. In the case that other parts are used which constitute an improvement, BEHRINGER may, at its discretion, charge the customer for the additional cost of these parts.

2. If the warranty claim proves to be justified, the product will be returned to the user freight prepaid.

3. Warranty claims other than those indicated above are expressly excluded.

§ 4 RETURN AUTHORIZATION NUMBER

1. To obtain warranty service, the buyer (or his authorized dealer) must call BEHRINGER (see enclosed list) during normal business hours **BEFORE** returning the product. All inquiries must be accompanied by a description of the problem. BEHRINGER will then issue a return authorization number.

2. Subsequently, the product must be returned in its original shipping carton, together with the return authorization number to the address indicated by BEHRINGER.

3. Shipments without freight prepaid will not be accepted.

§ 5 WARRANTY REGULATIONS

1. Warranty services will be furnished only if the product is accompanied by a copy of the original retail dealer's invoice. Any product deemed eligible for repair or replacement under the terms of this warranty will be repaired or replaced.

2. If the product needs to be modified or adapted in order to comply with applicable technical or safety standards on a national or local level, in any country which is not the country for which the product was originally developed and manufactured, this modification/adaptation shall not be considered a defect in materials or workmanship. The warranty does not cover any such modification/adaptation, irrespective of whether it was carried out properly or not. Under the terms of this warranty, BEHRINGER shall not be held responsible for any cost resulting from such a modification/adaptation.

3. Free inspections and maintenance/repair work are expressly excluded from this warranty, in particular, if caused by improper handling of the product by the user. This also applies to defects caused by normal wear and tear, in particular, of faders, crossfaders, potentiometers, keys/buttons, tubes, guitar strings, illuminants and similar parts.

4. Damages/defects caused by the following conditions are not covered by this warranty:

- ▲ improper handling, neglect or failure to operate the unit in compliance with the instructions given in BEHRINGER user or service manuals.
- ▲ connection or operation of the unit in any way that does not comply with the technical or safety regulations applicable in the country where the product is used.
- ▲ damages/defects caused by force majeure or any other condition that is beyond the control of BEHRINGER.

5. Any repair or opening of the unit carried out by unauthorized personnel (user included) will void the warranty.

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6. If an inspection of the product by BEHRINGER shows that the defect in question is not covered by the warranty, the inspection costs are payable by the customer.

7. Products which do not meet the terms of this warranty will be repaired exclusively at the buyer's expense. BEHRINGER will inform the buyer of any such circumstance. If the buyer fails to submit a written repair order within 6 weeks after notification, BEHRINGER will return the unit C.O.D. with a separate invoice for freight and packing. Such costs will also be invoiced separately when the buyer has sent in a written repair order.

§ 6 WARRANTY TRANSFERABILITY

This warranty is extended exclusively to the original buyer (customer of retail dealer) and is not transferable to anyone who may subsequently purchase this product. No other person (retail dealer, etc.) shall be entitled to give any warranty promise on behalf of BEHRINGER.

§ 7 CLAIM FOR DAMAGES

Failure of BEHRINGER to provide proper warranty service shall not entitle the buyer to claim (consequential) damages. In no event shall the liability of BEHRINGER exceed the invoiced value of the product.

* Customers in the European Union please contact BEHRINGER Germany Support for further details.

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FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE INFORMATION

BEHRINGER

MINIFEX FEX800

Responsible party name:	**MUSIC Group Services USA, Inc.**
Address:	**18912 North Creek Parkway, Suite 200 Bothell, WA 98011, USA**
Phone/Fax No.:	**Phone: +1 425 672 0816** **Fax: +1 425 673 7647**

MINIFEX FEX800

complies with the FCC rules as mentioned in the following paragraph:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Important information:

Changes or modifications to the equipment not expressly approved by MUSIC Group can void the user's authority to use the equipment.